

A color printing apparatus includes a printer driver for receiving a print instruction of print data issued from an application program, and for rasterizing the print data to produce con-tone/multi-bits bitmap data and bi-tone/single-bit bitmap data; a page memory for independently storing therein both the con-tone/multi-bits bitmap data and the bi-tone/single-bit bitmap data; a control unit for executing a control operation in such a manner that the con-tone/multi-bits bitmap data is converted into con-tone/multi-bits print data, the bi-tone/single-bit bitmap data is converted into bi-tone/single-bit print data, and at least one of the con-tone/multi-bits print data and the bi-tone/single-bit print data is stored into the page memory in a bitmap format; and an output control unit for reading at least any one of the con-tone/multi-bits print data and the bi-tone/single-bit print data from the page memory, and for logically synthesizing the print data with each other to output the synthesized print data to a color printing unit, reducing the data amount of the bitmap data.